

C. Remarks

The claims are 1-15, 19, 21-23 and 26, with claims 1, 4, 6, 8, 11, 12, 15, 19 and 21 being independent. Claims 4-15 and 26 have been withdrawn from consideration as directed to a non-elected invention. Claims 20 and 24 have been cancelled. Claims 1, 19 and 21 have been amended to better define the present invention. Support for this amendment may be found, *inter alia*, in the specification at page 10, lines 12-22; page 15, line 27 - page 16, line 8; and page 21, line 12 - page 22, line 22, and in Figs. 8 and 9. Claim 2 has been amended to reflect the changes in claim 1. Claims 22 and 23 have been amended to reflect the changes in claim 21. No new matter has been added. Reconsideration of the claims is expressly requested.

The Examiner stated that new formal drawings must be submitted to reflect the previously requested changes. Applicants submit herewith the requisite new formal drawings.

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 4,546,022 (Madonia), as evidenced by U.S. Patent No. 4,493,806 (Hatzikelis). Claims 21-23 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 5,851,624 (Ang). Claim 3 stands rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by, or in the alternative under 35 U.S.C. § 103(a) as being allegedly obvious from, Madonia, as evidenced by Hatzikelis. Claims 1-3 and 24 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by, or in the alternative under 35 U.S.C. § 103(a) as being allegedly obvious from, Ang. Claim 19 stands rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Madonia, as

evidenced by Hatzikelis, U.S. Patent Nos. 4,448,608 (Jenkins) and 5,508,060 (Perman).

Claim 23 stands rejected under 35 U.S.C. § 103(a) as being allegedly obvious from Ang.

The grounds of rejection are respectfully traversed.

Prior to addressing the merits of rejection, Applicants would like to briefly review some of the key features and advantages of the presently claimed invention. The present invention is primarily directed to a multilayered structure resin molded product comprising a core layer and a skin layer. The product is injection-molded using a pulverized resin material, which is formed by disassembling, pulverizing, cleaning and classifying a molded product molded from a thermoplastic resin material. The pulverized resin material is employed for forming the core layer. A virgin material is employed for forming the skin layer. The resin material of the core layer and a resin material of the skin layer are chemically the same type of resin.

The molded product produced as presently claimed maintains a level of performance that is not greatly deteriorated compared with that of a molded product comprising solely a virgin material. Since the resin material, which is used for the core layer, is chemically the same kind of resin as the material used for the skin layer, the core layer and the skin layer are easily combined and the strength of the molded product is not greatly reduced, even though the resin material of the core layer is slightly degraded by recycling. As a result, the thermoplastic resin material can be recycled at a lower cost.

Madonia discloses that a decorative molding, which is used as a part of a car, is formed from a core portion and an outer portion, and that a recycled resin material is used for the core portion for the purpose of reducing the density of the core portion. The

Examiner used the teachings of Hatzikelis to show that a process for obtaining a recycled plastic of Madonia's interior part anticipates the present invention. Applicants respectfully disagree.

Hatzikelis discloses a recycling method comprising the steps of scrapping resin molded products, grinding the resin molded product for reduction, chilling the resin molded product, pulverizing the resin molded material and pelletizing the pulverized material. In the present invention, however, there is no need to heat or cool the resin material that is recycled before injection molding for the purpose of adjusting the properties of the pulverized resin material, because the pulverized (recycled) resin material used for the core layer and the virgin resin material used for the skin layer are chemically the same kind of resin and properties of the resin material used for the core layer and the resin material used for the skin layer are essentially similar. Therefore, in the present invention, the number of steps used for recycling the resin material is reduced and the recycled resin material can be obtained at a low cost. Further, the properties of the recycled resin material in the present invention are not as degraded compared to the virgin material as they are according to the teachings in Hatzikelis, because the recycled resin material is not exposed to the heating or cooling processes.

Further, the Examiner will note that in Hatzikelis, a the plastic is cooled (chilled) before being pulverized also in order to avoid removing impurities from the recycled plastic after it is pulverized. Applicants respectfully submit that this reference is directed to excluding the step of removing contaminants. To the contrary, the present claimed invention requires the pulverized plastic to be cleaned. An impurity separation

(cleaning) process and the apparatus configured to carry out this function, as described on page 17 and shown in Fig. 4.

Clearly, the presently claimed product is produced by a different process than the product in Hatzikelis. The differences in the production process of the resin molded product between the present invention and Hatzikelis resulted in patentably distinct differences in the formed product. Specifically, the presently claimed product is more durable due to the lack of the cooling process, which lack is substantiated by the presence of the cleaning process and the chemical compatibility of the resin materials. Also, the presently claimed product is less expensive to produce. Accordingly, the multilayered structure resin molded product of the present invention is clearly patentable over Madonia, Hatzikelis, Jenkins and Perman, whether these references are considered separately or in any combination.¹

Ang cannot affect the patentability of present invention. With respect to claims 1-3, as the Examiner has recognized, Ang does not disclose or suggest the presently claimed process for forming the resin molded product. Since, as discussed above, this process provides a superior product, which is different from the products formed in the prior art, e.g., Hatzikelis, Ang's lack of disclosure of the claimed process renders this reference incapable of affecting the patentability of the present invention.

With respect to claim 21, this claim recites a multilayered structure resin molded product comprising a core layer and a skin layer formed by a process recited in

¹/ Jenkins and Perman were cited for the disclosure of the color scale and are therefore unable to provide the teaching regarding controlling the outside appearance that is missing in Madonia.

claim 1. The resin molded product has a projecting portion for mounting another part, and the projecting portion is formed integrally with the skin layer only from the same material as the skin layer. In other words, in the present invention, the projecting portion is not formed from the recycled material, but is formed only from the virgin material, because the projecting portion is required to have a predetermined elasticity or rigidity.

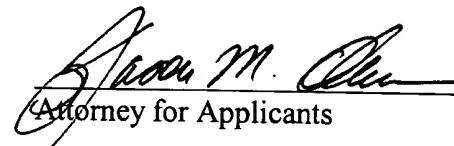
Ang discloses a vehicle instrument panel, which is formed from a core layer and a skin layer, and that the instrument panel has a traverse cross channel to which another part, such as an air blower, is attached. The traverse cross channel has a duct formed therein. The Examiner will note, however, that this traverse cross channel is merely a convex portion, and it is not required to have a predetermined elasticity or rigidity that is necessary for the projection portion recited in claim 21. Furthermore, the core layer and the skin layer of the traverse cross channel have the same outer shape. Therefore, in Ang, the traverse cross channel is not formed integrally with the skin layer only from the same material as the skin layer. Thus clearly, Ang cannot affect the patentability of claim 21, or any claim dependent therefrom.

In conclusion, Applicants respectfully submit that the cited references, whether considered separately or in any combination, do not disclose or suggest a combination of elements as presently claimed.

Wherefore, Applicants respectfully request that all rejections be withdrawn and that the present case be passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,



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